In the Claims:

1. (Original) A method of increasing leptin release from adipocyte cells of a mammalian subject, comprising administering an FXR agonist to said subject in an amount effective to increase leptin release, compared to that which would occur in the absence of said FXR agonist administration.

2. (Original) A method of decreasing glucose uptake by adipocyte cells of a mammalian subject, comprising administering an FXR agonist to said subject in an amount effective to decrease glucose uptake compared to that which would occur in the absence of said FXR agonist administration.

3. (Original) A method of treating a mammalian subject in need of weight loss treatment, comprising administering to said subject a pharmaceutically acceptable FXR agonist in an amount effective to decrease said subject's weight, compared to the weight loss that would occur in the absence of FXR agonist treatment.

4. (Original) A method of reducing total body mass of a mammalian subject, comprising administering to a subject a pharmaceutically acceptable FXR agonist in an amount effective to reduce said subject's total body mass, compared to the subject's total body mass that would occur in the absence of FXR agonist treatment.

5. (Original) A method of increasing the metabolic rate of a mammalian subject, comprising administering to a subject a pharmaceutically acceptable FXR agonist in an amount effective to increase the metabolic rate of said subject, compared to the rate that would occur in the absence of FXR agonist treatment.

6. (Original) A method of increasing serum leptin in a mammalian subject, comprising administering to a subject a pharmaceutically acceptable FXR agonist in an amount effective to increase serum leptin in said subject, compared to that would occur in the absence of FXR agonist treatment.

7. (currently amended) A method according to claim 1 ~~any preceding claim~~, wherein said FXR agonist is selected from the group consisting of GW4064; 3α,7α-dihydroxy-6α-ethyl-5β-cholan-24-oic acid; 3α,7α-dihydroxy-6α-propyl-5β-cholan-24-oic acid; and 3α,7α-dihydroxy-6α-allyl-5β-cholan-24-oic acid, and pharmaceutically acceptable salts, solvates or amino acid conjugates thereof.

8. (Canceled)

9. (Canceled)

10. (Canceled)

11. (Original) A method of inducing expression of FGF19 in a human hepatocyte cell, comprising administering an FXR agonist to said cell.

12. (Original) A method according to claim 11, wherein said FXR agonist is selected from the group consisting of GW4064; 3α,7α-dihydroxy-6α-ethyl-5β-cholan-24-oic acid; 3α,7α-dihydroxy-6α-propyl-5β-cholan-24-oic acid; and 3α,7α-dihydroxy-6α-allyl-5β-cholan-24-oic acid, and pharmaceutically acceptable salts, solvates or amino acid conjugates thereof.

13. (Original) A method according to claim 11 where said cell is *in vitro.*

14. (New) A method according to claim 2, wherein said FXR agonist is selected from the group consisting of GW4064; 3α,7α-dihydroxy-6α-ethyl-5β-cholan-24-oic acid; 3α,7α-dihydroxy-6α-propyl-5β-cholan-24-oic acid; and 3α,7α-dihydroxy-6α-allyl-5β-cholan-24-oic acid, and pharmaceutically acceptable salts, solvates or amino acid conjugates thereof.

15. (New) A method according to claim 3, wherein said FXR agonist is selected from the group consisting of GW4064; 3α,7α-dihydroxy-6α-ethyl-5β-cholan-24-oic acid; 3α,7α-dihydroxy-6α-propyl-5β-cholan-24-oic acid; and 3α,7α-dihydroxy-6α-allyl-5β-cholan-24-oic acid, and pharmaceutically acceptable salts, solvates or amino acid conjugates thereof.

16. (New) A method according to claim 3, wherein said FXR agonist is selected from the group consisting of GW4064; 3α,7α-dihydroxy-6α-ethyl-5β-cholan-24-oic acid; 3α,7α-dihydroxy-6α-propyl-5β-cholan-24-oic acid; and 3α,7α-dihydroxy-6α-allyl-5β-cholan-24-oic acid, and pharmaceutically acceptable salts, solvates or amino acid conjugates thereof.

17. (New) A method according to claim 4, wherein said FXR agonist is selected from the group consisting of GW4064; 3α,7α-dihydroxy-6α-ethyl-5β-cholan-24-oic acid; 3α,7α-dihydroxy-6α-propyl-5β-cholan-24-oic acid; and 3α,7α-dihydroxy-6α-allyl-5β-cholan-24-oic acid, and pharmaceutically acceptable salts, solvates or amino acid conjugates thereof.

18. (New) A method according to claim 5, wherein said FXR agonist is selected from the group consisting of GW4064; 3α,7α-dihydroxy-6α-ethyl-5β-cholan-24-oic acid; 3α,7α-dihydroxy-6α-propyl-5β-cholan-24-oic acid; and 3α,7α-dihydroxy-6α-allyl-5β-cholan-24-oic acid, and pharmaceutically acceptable salts, solvates or amino acid conjugates thereof.

19. (New) A method according to claim 6, wherein said FXR agonist is selected from the group consisting of GW4064; 3α,7α-dihydroxy-6α-ethyl-5β-cholan-24-oic acid; 3α,7α-dihydroxy-6α-propyl-5β-cholan-24-oic acid; and 3α,7α-dihydroxy-6α-allyl-5β-cholan-24-oic acid, and pharmaceutically acceptable salts, solvates or amino acid conjugates thereof.